SAN FRANCISCO DISTRICT

US Army Corps
of Engineers

PUBLIC NOTICE

NUMBER: 27629S Dredging – Port of Oakland
DATE: June 30, 2003
RESPONSE REQUIRED BY: July 30, 2003

Regulatory Branch
333 Market Street
San Francisco, CA 94105-2197

PERMIT MANAGER: Clyde Davis PHONE: (415) 977-8449; E-mail: clyde.r.davis@usace.army.mil

1. **INTRODUCTION:** The Port of Oakland (Mr. Joseph Wong, Port of Oakland, Director of Engineering, 530 Water Street, Oakland, California) has applied for a ten-year Department of the Army permit to maintenance dredge the Oakland Outer, Middle, and Inner Harbors within the San Francisco Bay Area, in Oakland, Alameda County, California. The purpose of the proposed dredging is to maintain adequate berth and marina depths for safe navigation. This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344), Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. **PROJECT DESCRIPTION:** The Port area comprises approximately 600 acres and 19 miles of shoreline within the City of Oakland. In addition to this land area, the Port area consists of subtidal area in the Outer and Inner Harbors of the Oakland Estuary. As shown in the attached drawings, the 32 berth and 8 marina sites to be included in the maintenance dredging program are part of the Oakland Outer, Middle, and Inner Harbors.

The applicant plans to remove approximately 1,234,000 cubic yards (cy) of sediment from the 88-acre (approximately) Port area over the life of the permit. Existing depths range from -12 to -52 feet mean lower low water (MLLW). The design depths for the marinas and berths range from -12 to -50 feet MLLW plus an additional 1 to 2-foot overdredge allowance. The material would be removed using a clamshell, hydraulic dredge, trailing suction hopper or excavator. In addition ancillary workboats and survey vessels, 1000 to 5000-cy hopper barges, flat barges, split-hull barges would be used. I-beams would be used for grading of underwater shoals. Dredged material would be transported to the Alcatraz (SF-11) or San Francisco Deep Ocean (SF-DODS) Aquatic Disposal Sites, as well as various upland, wetland and reuse disposal sites.

In addition to placement at SF-11, disposal options for the dredged sediment from the Port's berths and marinas include:

- Open ocean disposal at the San Francisco deep-ocean disposal site (SF-DODS)
- Tidal and subtidal wetland creation (wetland beneficial re-use)
- Fill to create new land/construction fill
- Levee maintenance, and
- Upland disposal

Proposed upland, wetland, and reuse disposal sites are:

1. Altamont Landfill, upland disposal (landfill).
2. Redwood Sanitary Landfill, upland disposal (landfill).
3. Vasco Road Landfill, upland disposal (landfill).
4. West Contra Costa Landfill, upland disposal (landfill).
5. Berth 10, upland disposal (Port of Oakland site).
6. Other Port Construction Sites, upland disposal (Port of Oakland Site).
7. Winter Island, beneficial re-use site (levee maintenance).

8. Montezuma Wetlands, beneficial re-use site (wetlands restoration).

Prior to each dredging episode, the Dredge Material Management Office (DMMO) will evaluate the sediments to be dredged for disposal or reuse suitability. The DMMO includes representatives from the U.S. Environmental Protection Agency (USEPA), San Francisco Bay Conservation and Development Commission (BCDC), San Francisco Bay Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (Corps). The DMMO is tasked with approving sampling and analysis plans in conformity with testing manuals, reviewing the test results and reaching consensus regarding a suitable disposition for the material.

The sediment that accumulates in berthing and marina areas is known as maintenance material. Maintenance material is defined as unconsolidated (loose) fine-grained sediments – typically young bay muds – comprising approximately 90% silts and clays. Maintenance material accumulates at waterside vessel facilities between routine dredging episodes as a result of natural sediment inflows from rivers, creeks, and surface runoff. It also accumulates as a result of resuspension and redistribution of sediment in San Francisco Bay. Maintenance material consists solely of the sediment that has accumulated above the permitted maintenance depth. The permitted maintenance depth is the depth to which an area has been previously deepened by dredging.

Generally, maintenance material accumulates relatively evenly. However, in some locations within a berth or marina, sediment accumulates in discrete areas, in such a way that it forms shoals (mounded sediments). Shoals are topographical high spots (elevated areas) that differ significantly in elevation from the remainder of the project area (berth or marina). Shoals can occur anywhere, but generally are not spatially or temporally predictable; shoals do, however, often appear after storms. They are common along the face of the wharf as a result of ship docking and maneuvering inside a berth. In some cases, the existence of a shoal is known, and the Port can plan for its removal before a ship is scheduled to call (use a berth). However, as stated earlier, shoals are not predictable; often, the Port does not know that a shoal exists until a ship hits it and runs aground or until a sounding reveals the topographical high. Soundings are taken only a few (two to four) times per year, and are not taken continuously.

The applicant proposes to include the grading of sediments located underwater in Port-maintained waterside vessel facilities as part of the maintenance dredging program. This type of grading (also known as knockdowns) would take place in the Port of Oakland's berths and recreational marinas. Grading of underwater sediments constitutes a maintenance dredging activity because it pertains to the management of maintenance material and because it serves to maintain waterside vessel facilities in a functional state. However, because shoals appear irregularly and unpredictably, this type of grading is best defined as a non-routine maintenance dredging activity, and it would be performed intermittently rather than routinely.

A knockdown is performed using either a clamshell or an I-beam. One tugboat is needed to tow the beam. The tugboat would drag the beam over the sediment, forcing any mounded sediments to be flattened. Because a towed beam could potentially damage a wharf, a clamshell would be used for grading along the face of a wharf. A clamshell would scoop the mounded sediment, raise it slightly from the bottom, and release it in a circular motion over a larger area, effectively dispersing the mound within the confines of the project area. In contrast to routine maintenance dredging, knockdowns require only a tugboat and a small clamshell dredge, or an I-beam. Because the equipment is less massive, easier to mobilize and less costly to operate, knockdowns are less expensive and require substantially less planning than dredging does. Knockdowns also move less material than a full event and only disperse material within the normal dredging footprint for removal under a later dredging event.

The Port has proposed additional permit conditions for implementing knockdown activities. The Port would follow these procedures in the event that a knockdown is determined to be needed. The Port proposes that these procedures include the following:

1. Shoal areas would be identified and delineated by the Port from condition soundings.
2. The volume to be graded would not exceed 2500 cubic yards (per shoal).
3. Equipment used would be a tugboat, and a small clamshell dredge vessel or a towed I-beam, depending on the proximity of the shoal to the wharf face.
4. The Port would submit a request to perform knockdowns to the DMMO. In cases of emergency, the Port would request a response from the DMMO within 24 to 48 hours of its request. The request (whether emergency or non-emergency) would include a copy of the sounding(s), a site history, a description of the equipment to be used, and the reason for requesting the knock-down (e.g., ship needs to call in 2 to 3 days).
5. The Port would submit pre- and post-grading soundings to the DMMO to show that material was redistributed within the berth, but not removed from the berth.

For the implementation of knockdowns, the Port will not conduct chemical screening of the shoaled sediments. Current testing and sampling protocols for dredging, including maintenance dredging, are set forth in the Inland Testing Manual (ITM). The ITM was drafted by the USEPA and the Corps in order to generate sufficient information from dredging projects to ensure that *disposal* does not result in chemical degradation, biological degradation, or unacceptable impacts to the beneficial uses of the Bay. Alternatively stated, the purpose of the ITM is to ensure that dredged material from any area would not degrade the sediment and water quality of the disposal site. In the case of knockdowns, no disposal site is required. The activity pertains only to the movement of material *within* the boundaries of the area requiring dredging. The likelihood that a shoal within a berth is of significantly different chemical constituency than the remainder of the berth is low. Furthermore, resuspension and redistribution of sediments, including shoaled sediments, within a berth or marina occurs on a regular basis as a result of cargo and recreational vessel traffic and berthing. Knockdowns would increase the short-term rate at which this resuspension and redistribution occurs, but would not introduce a mechanism that does not already take place. Any potential contaminants would be redistributed within the berth area only. The same berth sediments to undergo a knockdown would be dredged at a future time as part of the routine annual maintenance dredging program, chemical and biological tests of the sediments would be performed at that time, and any contaminated material would be removed and disposed of appropriately.

The applicant also proposes to implement measures for "advance" maintenance dredging. Rather than dredge an entire berth to depths below the permitted depths in order to achieve this advance maintenance, the Port has designed trenches in areas of selected berths to provide extra capacity for knockdown material. This advance maintenance dredging approach would work in tandem with the Port's proposal to implement knockdowns on a regular, non-routine basis as part of maintenance dredging – the use of an I-beam or other equipment to redistribute sediment within the berth in question could effectively move the sediment to these trenches, to be removed at a later date during regular maintenance dredging. These trenches would be approximately three feet deep and would generally extend along the length of the berth. The width of the trenches would vary, but would likely be approximately half the width of the berth in most cases. The trench would ideally be located in an area in the berth that has a relatively high rate of sediment accumulation. Often, this area is the area closest to the wharf face. Excavating the trench near the wharf face, however, would potentially compromise the stability of the wharf. As shown in the attached figures, the trenches are proposed to be excavated along the length of the wharf, approximately 20 feet from the wharf face.

The trenches would potentially have the capacity to accommodate large volumes of dredged material, which would reduce the required frequency of dredging and the overall cost to maintain the berths to their permitted depths. Because these trenches would also provide an accessible source of accumulated sediment, sediment testing required for routine maintenance dredging would also be made easier, and would produce analytical results that would be representative of berth sediments as a whole.

The Port proposes to initiate this advance maintenance strategy by dredging trenches in Berth 30 and Berths 25/26, and to monitor the success of these initial berth trenches over a period of approximately three years. The excavation of these trenches would result in the deepening of part of these berths to -47 feet MLLW (plus two feet of overdredge) and part to -49 feet MLLW (plus two feet of overdredge), three feet below the currently permitted depth for these berths. If the Port determines after the three-year period that the implementation of this advance maintenance strategy, in conjunction with knockdowns, results in increased efficiency of dredging, the Port will design further trenches to be excavated in other berths. As part of the berth deepening that will begin to take place at Port berths within the next few years (50-Foot Deepening Project), the Port will apply for permits from the regulatory agencies to deepen the berths to -50 feet MLLW (plus two feet of overdepth), and at that time will incorporate into these permit applications a request to excavate advance maintenance trenches in the berths below the -50-foot limit.

3. **STATE APPROVALS:** Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must obtain a State water quality certification before a Corps permit may be issued. The applicant has provided the Corps with evidence that he has submitted a valid request for State water quality certification to the San Francisco Bay Regional Water Quality Control Board. No Corps permit will be granted until the applicant obtains the required certification. A waiver shall be deemed to have occurred if the State fails or refuses to act on a valid request for certification within 60 days after receipt, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Those parties concerned with any water quality issues that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, by the close of the comment period of this Public Notice.

The project is within the jurisdictional purview of the BCDC. The applicant will be required to obtain a permit from BCDC after the RWQCB has made a determination of water quality certification for this project.

4. **ENVIRONMENTAL ASSESSMENT:** The Corps of Engineers will assess the environmental impacts of the proposed project in accordance with the requirements of the National Environmental Policy Act (42 U.S.C. 4371 et. seq.), and pursuant to Council on Environmental Quality's Regulations 40 CFR 1500-1508, and USACE Regulations 33 CFR 230 and 325, Appendix B. Unless otherwise stated, this Environmental Assessment describes only the impacts (direct, indirect, and cumulative) resulting from activities within the jurisdiction of the Corps of Engineers. The documents used in the preparation of this Environmental Assessment are on file in the U.S. Army Corps of Engineers, San Francisco District, Regulatory Branch, 333 Market Street, San Francisco, California.

Endangered Species – There are a variety of federally listed animal species that may occur in the vicinity of the proposed project area and/or disposal area. Therefore, dredging and disposal will be performed during the work windows identified in the *Management Plan 2001,* Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay, dated July 2001 (LTMS) as established by the existing Biological Opinions of the Resource agencies. However, if work is to be conducted outside of the work windows, the Corps will initiate consultation with the U.S. Fish and

Wildlife Service and/or the National Marine Fisheries Service as required by Section 7 of the Endangered Species Act.

The Corps has concerns regarding potential impacts to Pacific herring during its annual spawning season. The proposed maintenance dredging will occur within the traditional Pacific herring spawning grounds. As a result, the Corps will condition the permit (if issued) so that dredging will not be allowed during the peak of the spawning season.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The proposal would impact approximately 87.7 acres of EFH utilized by various species of sole, shark and rockfish. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in California waters. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NOAA Fisheries.

5. **EVALUATION OF ALTERNATIVES**: Evaluation of this activity's impact on the public interest will also include application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b)(1) of the Clean Water Act (33 U.S.C. 1344(b)). In particular, alternative disposal sites and beneficial reuses will be considered by the applicant to conform to the LTMS.

6. **PUBLIC INTEREST EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts that the proposed activity may have on the public interest requires a careful weighing of all those factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors that may be relevant to the proposal must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

7. **CONSIDERATION OF COMMENTS:** The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

8. **SUBMISSION OF COMMENTS:** Interested parties may submit in writing any comments concerning this activity. Comments should include the applicant's name, the number, and the date of this Notice and should be forwarded so as to reach this office within the comment period specified on page one of this Notice. Comments should be sent to: Mr. Clyde Davis, Regulatory Branch. It is Corps policy to forward any such comments that include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this Notice that a public hearing

be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose address is indicated in the first paragraph of this Notice, or by contacting Mr. Clyde Davis of our office at telephone (415) 977-8449 or by e-mail at clyde.r.davis@usace.army.mil. Details on any changes of a minor nature that are made in the final permit action will be provided on request.